

## **REMARKS**

### **I. PRELIMINARY REMARKS**

Claims 52, 65 and 68-70 have been amended. Claim 108 has been added. No claims have been canceled. Claims 45, 47, 48, 50-54, 65, 68-71, 73-81, 83-87, 89, 90, 92-96 and 99-108 remain in the application. Reexamination and reconsideration of the application, as amended, are respectfully requested.

Applicant notes with appreciation that claims 45, 71, 75-79, 95, 96, 101 and 104 have been allowed. Concerning the remarks on pages 9 and 10 of the Office Action, applicant notes for the record that the Statement of Reasons for Allowance “is not intended to necessarily state all the reasons for allowance or all the details why claims are allowed.” [MPEP 1302.14.] Additionally, the inventions claimed in the present application respectively comprise various elements in combination. Applicant respectfully submits that the patentability of each invention derives from the claimed combination of elements defining that invention, viewed as a whole, rather than from the presence of any particular element (or elements) in the combination.

With respect to the objection to claim 97, the prior typographical error has been corrected and canceled claim 97 is now shown in the listing of claims presented above.

### **II. REJECTION UNDER 35 U.S.C. § 102 BASED ON HAMMERSLAG**

#### **A. The Rejection**

Claims 47, 48, 50, 51, 53, 54, 65, 68, 80, 81, 87, 89 and 90 have been rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 5,378,234 to Hammerslag (“Hammerslag”). The rejection under 35 U.S.C. § 102 is respectfully traversed to the extent that it is applicable to the claims as amended above. Reconsideration thereof is respectfully requested.

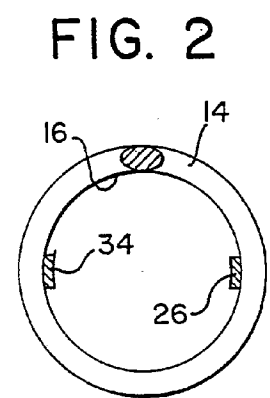
## B. Hammerslag

Referring to Figures 1 and 2, Hammerslag discloses a steerable sheath 10 that includes a spring coil 14, an end cap 20, and a pull ribbon 34 that deflects the spring coil. A deflection ribbon 26 is located along the inner surface of the distal portion of the spring coil 14 opposite the pull ribbon 34. The distal end of the deflection ribbon 26 is held between the inner surface of the spring coil 14 and the end cap 20. [Col. 4, ll. 61-63.] The proximal end of the deflection ribbon 26 is secured to the inner surface of the spring coil 14 by proximal attachment 28, which is “a solder, braze or weld joint.” [Col. 4, l. 58 to col. 5, l. 5.]

## C. Discussion Concerning Claims 47, 48, 50, 51, 53, 54, 80 and 81

Independent claim 47 calls for a combination of elements including, *inter alia*, “an elongate body,” “a stiffening member associated with the distal portion of the elongate body,” “**an anti-tear device** positioned within the elongate body wall between the inner surface and the outer surface adjacent to at least a portion of the proximal half of the stiffening member and not adjacent to the distal half of the stiffening member, and **configured to prevent the stiffening member from tearing through the elongate body when the stiffening member bends**” and “a steering wire.” The respective combinations defined by claims 48, 50, 51, 53, 54, 80 and 81 include, *inter alia*, the elements recited in claim 47.

Hammerslag fails to teach or suggest the claimed combinations. For example, the Office Action has taken the position that the Hammerslag deflection ribbon 26 and proximal attachment 28 respectively correspond to the claimed “stiffening member” and the “anti-tear device.” [OA at p. 4.] Referring to Figure 2, applicant respectfully submits that one of skill in the art would recognize that the deflection ribbon 26 simply cannot tear through the spring coil 14. As such, there is no reasonable interpretation of “anti-tear device”



that would encompass the attachment point 28, which is nothing more than the “solder, braze or weld joint” which secures the deflection ribbon 26 to the spring coil 14.

As Hammerslag fails to teach or suggest each and every element of the combination recited in independent claim 47, applicant respectfully submits that the rejection of claims 47, 48, 50, 51, 53, 54, 80 and 81 under 35 U.S.C. § 102 should be withdrawn.

#### **D. Additional Discussion Concerning Claims 50 and 51**

In addition to the elements recited in independent claim 47, dependent claims 50 and 51 respectively indicate that the claimed “anti-tear device” comprises a “tubular member” and a “tubular member with a slot.” The “solder, braze or weld joint” that forms the proximal attachment 28 simply is not a “tubular member” or a “tubular member with a slot.” Accordingly, for reasons in addition to those discussed above with reference to independent claim 47, the rejection of claims 50 and 51 under 35 U.S.C. § 102 should be withdrawn.

Applicant also notes here that the Office Action did not explain how the “solder, braze or weld joint” that forms the proximal attachment 28 could be a “tubular member” or a “tubular member with a slot.” [OA at p. 4, last line.] **In order to clarify the issues in this application, applicant respectfully request that the next Office Action specifically address this issue.**

#### **E. Discussion Concerning Claims 65 and 87**

Independent claim 65 calls for a combination of elements including, *inter alia*, “an elongate body defining a diameter, a proximal portion and a distal portion and including ***a solid wall formed from a single material defining an inner surface, an outer surface and a lumen defined by the inner surface*** extending from the proximal portion to an aperture in the distal portion,” “***a steering wire having a distal portion that is located within the elongate body wall between the inner surface and the***

**outer surface,”** “a stiffening member” and “an **anti-tear device**, defining a proximal end and a distal end, secured directly to the proximal end of the stiffening member such that the proximal end of the anti-tear device is **located within the distal portion of the elongate body wall between the inner surface and the outer surface.**” The combination defined by claim 87 includes, *inter alia*, the elements recited in claim 65.

Hammerslag fails to teach or suggest the claimed combinations. For example, the Office Action has taken the position that the Hammerslag pull ribbon 34, deflection ribbon 26 and proximal attachment 28 respectively correspond to the claimed “steering wire,” “stiffening member” and the “anti-tear device.” [OA at p. 5.] Referring first to the embodiment illustrated in Figures 1-3, the purported “steering wire” (i.e., pull ribbon 34) is not located between the inner and outer surfaces of a “wall.” Instead, it is located inwardly of the inner surface of the spring coil 14. Turning to the embodiment illustrated in Figures 4 and 5, the pull ribbon 62 is located between the inner hypotube 66 and the spring coil 42. An outer shrink tube (not shown) covers the spring coil 42. [Col. 7, ll. 47-49.] Even if one were to take the position that the inner hypotube 66, spring coil 42 and outer shrink tube together form a “wall” in which the pull ribbon 62 is located, the wall is not “a solid wall formed from a single material.” The other embodiments suffer from a similar shortcoming.

As Hammerslag fails to teach or suggest each and every element of the combination recited in independent claim 65, applicant respectfully submits that the rejection of claims 65 and 87 under 35 U.S.C. § 102 should be withdrawn.

#### **F. Discussion Concerning Claims 68, 89 and 90**

Independent claim 68 calls for a combination of elements including, *inter alia*, “an elongate body ... including a wall,” “a stiffening member,” and “**anti-tear means**, secured directly to the proximal portion of the stiffening member and located within the elongate body wall between the inner surface and the outer surface, **for preventing the stiffening member from tearing through the elongate body wall.**” The respective

combinations defined by claims 68, 89 and 90 include, *inter alia*, the elements recited in claim 68.

Hammerslag fails to teach or suggest the claimed combinations. For example, the Office Action has taken the position that the Hammerslag deflection ribbon 26 and proximal attachment 28 respectively correspond to the claimed “stiffening member” and the “anti-tear means.” [OA at p. 6.] Nothing in Hammerslag even remotely suggests that the attachment point 28, which is simply the “solder, braze or weld joint” that secures the deflection ribbon 26 to the spring coil 14, performs the function of “preventing the [deflection ribbon 26] from tearing through the [spring coil 14].” Moreover, and referring to Figure 2, applicant respectfully submits that one of skill in the art would recognize that the deflection ribbon 26 simply cannot tear through the spring coil 14. As such, the attachment point 28 does not inherently perform the claimed function.

As Hammerslag fails to teach or suggest each and every element of the combination recited in independent claim 68, applicant respectfully submits that the rejection of claims 68, 89 and 90 under 35 U.S.C. § 102 should be withdrawn.

### **III. REJECTION UNDER 35 U.S.C. § 102 BASED ON MATSUURA**

#### **A. The Rejection**

Claims 52, 83-86, 106 and 107 have been rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 6,450,948 to Matsuura (“Matsuura”). The rejection under 35 U.S.C. § 102 is respectfully traversed to the extent that it is applicable to the claims as amended above. Reconsideration thereof is respectfully requested.

#### **B. Matsuura**

Matsuura discloses a variety of deflectable tips for use with steerable surgical instruments. The instrument illustrated in Figures 1-5 includes a deflectable tip section 40. The deflectable tip section 40 includes proximal and distal collars 50A and 50B on opposite

ends of a flexible tubular body 52. A pair of strengthening members 54 are positioned within the wall of the tubular body 52 and extend from the end collar 50A to the end collar 50B. Turning to Figure 22e, Matsuura also discloses the use of collars 1150A/1150B and ribbed strengthening members 1154A and 1154B.

### C. Discussion Concerning Claims 52, 83-86, 106 and 107

Independent claim 52 calls for a combination of elements including, *inter alia*, “an elongate body,” “a steering wire,” “a stiffening member associated with the distal portion of the elongate body” and “a substantially c-shaped anti-tear device ... associated with the stiffening member ***such that a portion of the stiffening member is distal of the anti-tear device.***” The respective combinations defined by claims 83-86, 106 and 107 include, *inter alia*, the elements recited in claim 52.

Matsuura fails to teach or suggest the claimed combinations. For example, and referring to Figure 22e, the Office Action has taken the position that the Matsuura collar 1150B corresponds to the claimed “stiffening member” and the strengthening members 1154A/B correspond to the claimed “anti-tear device.” [OA at p. 3.] As the strengthening members 1154A/B extend from collar 1150A to the collar 1150B (col. 7, ll. 53-54), no portion of the purported “stiffening member” (i.e., collar 1150B) is distal of the purported “anti-tear device” (i.e., strengthening members 1154A/B).

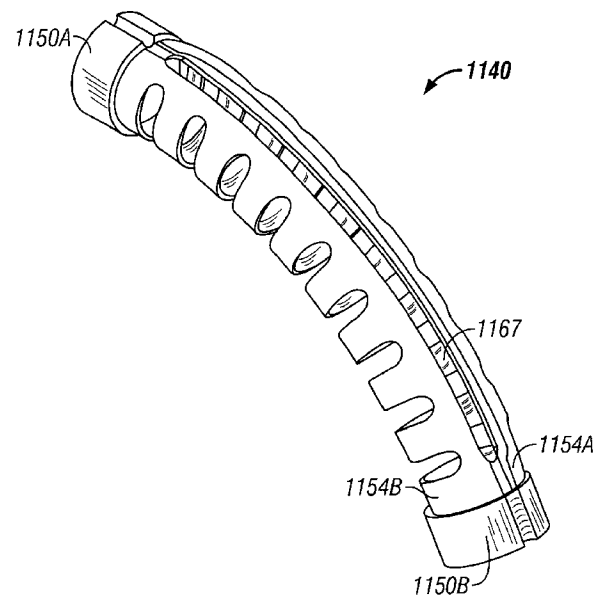


FIG. 22E

As Matsuura fails to teach or suggest each and every element of the combination recited in independent claim 52, applicant respectfully submits that the rejection of claims 52, 83-86, 106 and 107 under 35 U.S.C. § 102 should be withdrawn.

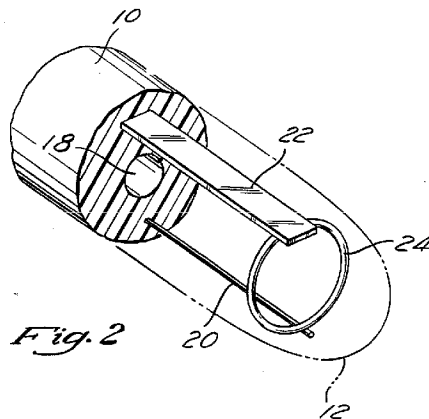
#### IV. REJECTION UNDER 35 U.S.C. § 102 BASED ON EBLING

##### A. The Rejection

Claims 69, 70, 73, 74, 92-94, 99, 100, 102 and 103 have been rejected under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 4,934,340 to Ebling ("Ebling"). The rejection under 35 U.S.C. § 102 is respectfully traversed to the extent that it is applicable to the claims as amended above. Reconsideration thereof is respectfully requested.

##### B. Ebling

Referring to Figure 2, Ebling discloses a catheter 10 with a distal portion 12. A contractile wire 20, a bendable support member 22, and one or more connecting members 24, which "physically connect the bendable support member 22 to the contractile wire 20 so as to form a unitary 'bending assembly' or structure within the distal portion of the catheter," are also provided. [Col. 4, ll. 1-5.]



##### C. Discussion Concerning Claims 69, 73, 74, 92, 99 and 102

Independent claim 69 calls for a combination of elements including, *inter alia*, "a steering wire," "an anchoring member," "a stiffening member" and "a substantially tubular." Claim 69 also indicates that "the **steering wire is not connected to the**

***substantially tubular member*** ...” The combinations defined by claims 73, 74, 92, 99 and 102 include, *inter alia*, the elements recited in claim 69.

Ebling fails to teach or suggest the claimed combinations. For example, the Office Action has apparently taken the position that the contractile wire 20 corresponds to the claimed “steering wire” and the connecting member 24 corresponds to the claimed “substantially tubular member.” [OA at p. 7.] In contrast to the invention defined by independent claim 69, however, the purported “steering wire” (i.e., the contractile wire 20) is **connected** to the purported “substantially tubular member” (i.e., the connecting member 24).

As Ebling fails to teach or suggest each and every element of the combination recited in independent claim 69, applicant respectfully submits that the rejection of claims 69, 73, 74, 92, 99 and 102 under 35 U.S.C. § 102 should be withdrawn.

#### **D. Discussion Concerning Claims 70, 93, 94 and 100**

Independent claim 70 calls for a combination of elements including, *inter alia*, “a steering wire,” “an anchoring member,” “a stiffening member” and “a substantially tubular member, ***including a slot through which the steering wire passes***, secured to the stiffening member.” The combinations defined by claims 93, 94 and 100 include, *inter alia*, the elements recited in claim 70.

Ebling fails to teach or suggest the claimed combinations. For example, the Office Action has apparently taken the position that the contractile wire 20 corresponds to the claimed “steering wire” and the connecting member 24 corresponds to the claimed “substantially tubular member.” [OA at p. 8.] In contrast to the invention defined by independent claim 70, however, the purported “steering wire” (i.e., the contractile wire 20) does not pass through a slot in the purported “substantially tubular member” (i.e., the connecting member 24).

As Ebling fails to teach or suggest each and every element of the combination recited in independent claim 70, applicant respectfully submits that the rejection of claims 70, 93, 94 and 100 under 35 U.S.C. § 102 should be withdrawn.



**V. NEWLY PRESENTED CLAIM 108**

Newly presented claim 108 depends from independent claim 52 and is patentable for at least the same reasons as claim 52.

**VI. CLOSING REMARKS**

In view of the foregoing, it is respectfully submitted that the claims in the application are in condition for allowance. Reexamination and reconsideration of the application, as amended, are respectfully requested. Allowance of the claims at an early date is courteously solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is respectfully requested to call applicant's undersigned representative at (310) 563-1458 to discuss the steps necessary for placing the application in condition for allowance.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-0638. Should such fees be associated with an extension of time, applicant respectfully requests that this paper be considered a petition therefor.

Respectfully submitted,

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Date

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